

ABSTRACT OF THE DISCLOSURE

In one aspect, the invention includes a method of forming a gated semiconductor assembly, comprising: a) forming a silicon nitride layer over and against a floating gate; and b) forming a control gate over the silicon nitride layer. In another aspect, the invention includes a method of forming a gated semiconductor assembly, comprising: a) forming a floating gate layer over a substrate; b) forming a silicon nitride layer over the floating gate layer, the silicon nitride layer comprising a first portion and a second portion elevationally displaced from the first portion, the first portion having a greater stoichiometric amount of silicon than the second portion; and c) forming a control gate over the silicon nitride layer. In yet another aspect, the invention includes a gated semiconductor assembly comprising: a) a substrate; b) a floating gate over the substrate; c) a control gate over the floating gate; and d) an electron barrier layer between the floating gate and the control gate, the electron barrier layer comprising a silicon nitride layer, the silicon nitride layer comprising a first portion and a second portion elevationally displaced from the first portion, the first portion having a greater stoichiometric amount of silicon than the second portion.